5

10

15

20

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

 A method for sending a secure multicast transmission, the method comprising: requesting to join a multicast broadcast at a user system;

encrypting the multicast transmission;

sending the encrypted multicast broadcast over a public network to a router associated with the user system requesting to join;

decrypting the sent multicast broadcast; and

sending the decrypted multicast broadcast to the user system requesting to join.

The method of Claim 1, wherein generating a multicast broadcast comprises generating the multicast broadcast at a computer system, and wherein encrypting the generated multicast broadcast comprises sending the generated multicast broadcast to a router local to the computer system for encrypting.

The method of Claim 2, wherein generating a multicast broadcast comprises attaching a local address to the generated multicast broadcast and sending the generated multicast broadcast with the local address to the router local to the computer system.

 The method of Claim 3, wherein encrypting the generated multicast broadcast comprises removing the local address and attaching a network multicast address to the encrypted multicast broadcast.

The method of Claim 1, wherein a plurality of user systems are associated with the router.

The method of Claim 1, wherein decrypting the sent multicast broadcast is performed at a router associated with the user system.

6. A system for sending a secure multicast transmission, the system comprising:

a computer system coupled to a public network and configured to encrypt the generated the multicast transmission;

a router coupled to the public network; and

a user system configured to request to join a multicast broadcast, wherein the user system is associated with the router,

wherein the router is configured to retrieve the encrypted multicast broadcast from the computer system over the public network, decrypt the sent



30

25

15

multicast broadcast, and send the decrypted multicast broadcast to the user system requesting to join.

- 7. The system of Claim 6, wherein the computer system comprises a router locally coupled to a multicast broadcast generating system.
- 8. The system of Claim 7, wherein the multicast broadcast generating system attaches a local address to the generated multicast broadcast and sends the generated multicast broadcast with the local address to the router.
 - The system of Claim 8, wherein the computer system router removes the local address, encrypts the sent multicast broadcast, and attaches a network multicast address to the encrypted multicast broadcast.
 - ()0. The system of Claim 6, wherein a plurality of user systems are associated with the router.